

CLAIMS

What is claimed is:

1. A method for controlling communications in a system for automatically distributing a software update to a network of devices controlled by an organization, the method comprising:
 - receiving a first request for available updates from a user interface, said request received by a web module;
 - processing said first request on said web module;
 - sending a second request for available updates from the web module to a main module;
 - placing said web module in a listen state;
 - processing said second request on said main module;
 - sending a third request for available updates from said main module to a patch module;
 - placing said main module in a listen state;
 - processing said third request on said patch module
 - sending a first reply with a list of available updates from said patch module to said main module;
 - sending a second reply with a list of available updates from said main module to said web module; and
 - sending a third reply with a list of available updates from said web module to said user interface.
2. The method of claim 1, wherein said web module is in a listen state, process state, or respond state.

3. The method of claim 1, wherein said main module is in a listen state, process state, or respond state.
4. The method of claim 1, wherein said patch module is in a listen state, process state, or respond state.
5. The method of claim 1, wherein said web module, main module, and patch module are located on a client.
6. The method of claim 1, wherein said web module, main module, and patch module are located on a server.
7. The method of claim 5, wherein said patch module communicates with a patch module on a server.
8. The method of claim 6, wherein said patch module communicates with a patch module on a client.
9. The method of claim 1, wherein each of said requests is an Extensible Markup Language (XML) schema.
10. The method of claim 1, wherein each of said replies in an Extensible Markup Language (XML) schema.

11. The method of claim 2, wherein in said listen state, a module waits for communication with another module.
12. The method of claim 2, wherein in said process state, a module:
determines the grammatical correctness of a request; and
generates a request.
13. The method of claim 2, wherein in said respond state, a module further generates a reply message.
14. The method of claim 3, wherein in said listen state, a module waits for communication with another module.
15. The method of claim 3, wherein in said process state, a module:
determines the grammatical correctness of a request; and
generates a request.
16. The method of claim 3, wherein in said respond state, a module further generates a reply message.
17. The method of claim 1, further comprising:
validating said requests for syntactical correctness upon receipt by a module.

18. An apparatus for controlling communications in a system for automatically distributing a software update to a network of devices controlled by an organization, the apparatus comprising:

a web module user interface request receiver;

a web module user interface request processor coupled to said web module user interface request receiver;

a web module request sender coupled to said web module user interface request processor;

a web module listen state placer coupled to said web module request sender;

a main module web module request processor coupled to said web module request sender;

a main module request sender coupled to said main module web module request processor;

a main module listen state placer coupled to said main module request processor;

a patch module main module request processor coupled to said main module request sender;

a patch module reply sender coupled to said patch module main module request processor;

a main module reply sender coupled to said patch module reply sender; and

a web module replay sender coupled to said main module reply sender.

19. The apparatus of claim 18, wherein the apparatus is located on a server.

20. The apparatus of claim 18, wherein the apparatus is located on a client.

21. An apparatus for controlling communications in a system for automatically distributing a software update to a network of devices controlled by an organization, the apparatus comprising:

means for receiving a first request for available updates from a user interface, said request received by a web module;

means for processing said first request on said web module;

means for sending a second request for available updates from the web module to a main module;

means for placing said web module in a listen state;

means for processing said second request on said main module;

means for sending a third request for available updates from said main module to a patch module;

means for placing said main module in a listen state;

means for processing said third request on said patch module

means for sending a first reply with a list of available updates from said patch module to said main module;

means for sending a second reply with a list of available updates from said main module to said web module; and

means for sending a third reply with a list of available updates from said web module to said user interface.

22. The apparatus of claim 21, wherein said web module is in a listen state, process state, or respond state.

23. The apparatus of claim 21, wherein said main module is in a listen state, process state, or respond state.
24. The apparatus of claim 21, wherein said patch module is in a listen state, process state, or respond state.
25. The apparatus of claim 21, wherein said web module, main module, and patch module are located on a client.
26. The apparatus of claim 21, wherein said web module, main module, and patch module are located on a server.
27. The apparatus of claim 25, wherein said patch module communicates with a patch module on a server.
28. The apparatus of claim 26, wherein said patch module communicates with a patch module on a client.
29. The apparatus of claim 21, wherein each of said requests is an Extensible Markup Language (XML) schema.
30. The apparatus of claim 21, wherein each of said replies is an Extensible Markup Language (XML) schema.

31. The apparatus of claim 22, wherein in said listen state, a module waits for communication with another module.
32. The apparatus of claim 22, wherein in said process state, a module:
determines the grammatical correctness of a request; and
generates a request.
33. The apparatus of claim 22, wherein in said respond state, a module further generates a reply message.
34. The apparatus of claim 23, wherein in said listen state, a module waits for communication with another module.
35. The apparatus of claim 23, wherein in said process state, a module:
determines the grammatical correctness of a request; and
generates a request.
36. The apparatus of claim 23, wherein in said respond state, a module further generates a reply message.
37. The apparatus of claim 21, further comprising:
validating said requests for syntactical correctness upon receipt by a module.

38. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for controlling communications in a system for automatically distributing a software update to a network of devices controlled by an organization, the method comprising:

- receiving a first request for available updates from a user interface, said request received by a web module;

- processing said first request on said web module;

- sending a second request for available updates from the web module to a main module;

- placing said web module in a listen state;

- processing said second request on said main module;

- sending a third request for available updates from said main module to a patch module;

- placing said main module in a listen state;

- processing said third request on said patch module

- sending a first reply with a list of available updates from said patch module to said main module;

- sending a second reply with a list of available updates from said main module to said web module; and

- sending a third reply with a list of available updates from said web module to said user interface.